DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017421 Address: 333 Burma Road **Date Inspected:** 14-Oct-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 10BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as RETRO-B3-10BE-056, Retro Plate. The welder is identified as #040484 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

Segment 11AE/11BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as BP186-001-020, Bottom Plate WT stiffener web splice. The welder is identified as #044515 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration

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(CJP) weld joint. The Weld joint is designated as SP634-001-044, Side Plate WT stiffener web splice. The welder is identified as #044515 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SP380-001-044, Side Plate WT stiffener web splice. The welder is identified as #500363 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

Segment 10BW/10CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW10E-032, 035, Diverter Plate. The welder is identified as #041713 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

Segment 11AE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as BP132-001-053, 054, Bottom Plate WT stiffener hold back weld. The welder is identified as #053871 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as SP380-001-025, 026, Side Plate WT stiffener hold back weld. The welder is identified as #053871 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as BP186-001-043, 044, Bottom Plate WT stiffener hold back weld. The welder is identified as #044515 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as SP634-001-033, 034, Side Plate WT stiffener hold back weld. The welder is identified as #044515 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112.

Segment 11BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as BP133-001-041, 042, Bottom Plate WT stiffener hold back weld. The welder is identified as #053871 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112.

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This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as SP381-001-001, 002, Side Plate WT stiffener hold back weld. The welder is identified as #053871 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as BP187-001-031, 032, Bottom Plate WT stiffener hold back weld. The welder is identified as #044515 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as SP635-001-013, 014, Side Plate WT stiffener hold back weld. The welder is identified as #044515 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as An Qing Xiang and Li Hua Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 10BE/10CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate transverse CJP splice, cross beam side. D scan was performed.

Segment 11BW

This QA Inspector observed fit up of the Bottom Panel at the FL3 of panel points 98 – 100.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer